

**LISTING OF CLAIMS:**

Agent for Applicant requests that the following amendments be made to the claims without adding any new subject matter.

1. (Currently Amended) A computer implemented system for enabling data analysis comprising:

A computer linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements; and

An analytical engine, linked to or executed by the computer, ~~that relies on one or more of the plurality of knowledge elements~~ that is operable to enable intelligent modeling, by the analytical engine applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables wherein the analytical engine includes a data management system for accessing and processing the knowledge elements.

2.-9. (Original)

10. (Currently Amended) A computer implemented system for enabling data analysis comprising:

a) A computer linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements; and

b) An analytical engine, linked to or executed by the computer ~~that relies on one or more of the plurality of knowledge elements~~ to enable intelligent modeling, by the analytical engine applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables, wherein the analytical engine is linked to a data management system for accessing and processing the knowledge elements.

## 11. (Currently Amended) A method of data analysis comprising:

- a) Providing an analytical engine, linked to or executed by a computer, that relies on one or more of a plurality of knowledge elements the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, wherein the analytical engine includes a data management system for accessing and processing the knowledge elements; and by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables; and
- b) Applying the intelligent modeling to the knowledge elements ~~so as to engage in~~ for data analysis.

## 12. (Currently Amended) A method of enabling parallel processing, comprising the steps of:

- a) Providing an analytical engine, linked to or executed by a computer, that relies on one or more of a plurality of knowledge elements the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, wherein the analytical engine includes a data management system for accessing and processing the knowledge elements; and by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables;
- b) Subdividing one or more databases into a plurality of parts and calculating a knowledge entity for each part using the same or a number of other computers to accomplish the calculations in parallel;
- c) Combining all or some of the knowledge entities to form one or more combined knowledge entities; and
- d) Applying the intelligent modeling to the knowledge elements of the combined knowledge entities so as to engage in data analysis.

13. (Currently Amended) A method of enabling scenario testing, wherein a scenario consists of a test of a hypothesis, comprising the steps of:

a) Providing an analytical engine, linked to or executed by a computer, that relies on one or more of a plurality of knowledge elements the computer being linked to one or more of data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables, whereby wherein the analytical engine is responsive to introduction of a hypothesis to create dynamically one or more new intelligent models; and

b) Applying the one or more new intelligent models to see future possibilities, obtain new insights into variable dependencies as well as to assess the ability of the intelligent models to explain data and predict outcomes.

14) (Currently Amended) A method of enabling dimension reduction, comprising the steps of:

a) Providing an analytical engine, linked to or executed by a computer, that relies on one or more of a plurality of knowledge elements the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, wherein the analytical engine includes a data management system for accessing and processing the knowledge elements, and by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables; and

b) Reducing the number of variables in a knowledge entity that includes the one or more of the plurality of knowledge elements by the analytical engine defining a new variable based on the combination of any two variables, and applying the new variable to the knowledge entity.

15) (Original)

## 16) (Currently Amended) A method of enabling dynamic queries:

- a) Providing an analytical engine, linked to or executed by a computer, ~~that relies on one or more of a plurality of knowledge elements~~ the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements, the analytical engine being operable to enable intelligent modeling, ~~wherein the analytical engine includes a data management system for accessing and processing the knowledge elements; and by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables;~~
- b) Establishing a series of questions that are directed to arriving at one or more particular outcomes; and
- c) Applying the analytical engine so as to select one or more sequences of the series of questions based on answers given to the questions, so as to rapidly converge on the one or more particular outcomes.

## 17) (Currently Amended) A method of enabling distributed processing:

- a) Providing an analytical engine, linked to or executed by a computer, ~~that relies on one or more of a plurality of knowledge elements~~ the computer being linked to one or more data sources adapted to provide to the computer a plurality of knowledge elements the analytical engine being operable to enable intelligent modeling, by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables, wherein the analytical engine includes a data management system for accessing and processing the knowledge elements, whereby the analytical engine enables the combination of a plurality of knowledge entities into a single knowledge entity; and
- b) Applying the intelligent modeling to the single knowledge entity.

## 18-20. (Original)

21. (Currently Amended) A computer program product for use on a computer system for enabling data analysis and process control comprising:

- a) a computer usable medium; and
- b) computer readable program code recorded on the computer useable medium, including:
  - i) program code that defines an analytical engine that relies on one or more of the that is operable to link to one or more data sources adapted to provide a plurality of knowledge elements to enable intelligent modeling, wherein the analytical engine includes a data management system for accessing and processing the knowledge elements, wherein the analytical engine is further operable to enable intelligent modeling based on one or more of the plurality of knowledge elements by applying one or more intelligent characteristics to one or more of the plurality of knowledge elements, the intelligent characteristics including one or more of (i) immediately utilizing new data, (ii) purposefully ignoring certain data, (iii) incorporating new variables, and/or (iv) not using specific variables.

22-32. (Original)

33. (New) The computer implemented system claimed in claim 1, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

34. (New) The computer implemented system claimed in claim 33, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

35. (New) The computer implemented system claimed in claim 10, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

36. (New) The computer implemented system claimed in claim 35, wherein the dynamic adaptation consists of the analytical engine dynamically applying the intelligent characteristics to the knowledge elements.

37. (New) The method of data analysis claimed in claim 36, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

38. (New) The method of data analysis claimed in claim 37, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

39. (New) The method of enabling parallel processing claimed in claim 12, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

40. (New) The method of enabling parallel processing claimed in claim 39, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

41. (New) The method of enabling scenario testing claimed in claim 13, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

42. (New) The method of enabling scenario testing claimed in claim 41, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

43. (New) The method of enabling dimension reduction claimed in claim 14, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

44. (New) The method of enabling dimension reduction claimed in claim 14, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

45. (New) The method of enabling dynamic queries claimed in claim 16, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

46. (New) The method of enabling dynamic queries claimed in claim 16, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

47. (New) The method of enabling distributed processing claimed in claim 17, wherein the analytical engine is operable to dynamically adapt to changes in the knowledge elements.

48. (New) The method of enabling distributed processing claimed in claim 17, wherein the intelligent characteristics can be utilized substantially on-line and/or in substantially real time.

#### **SPECIFICATION:**

Agent for Applicant requests that the following amendments be made to the specification without adding any new subject matter. The additions thereto are underlined, while the deletions therefrom are contained in double square brackets.

Application No.: <sup>10 PF</sup> 668,354  
Arr Unit 2129

[0009] Chen et al. examined the problem of applying OLAP to dynamic rather than static situations. In particular, they were interested in multi-dimensional regression analysis of time-series data streams. They recognized that it should be possible to use only a small number of pre-computed quantities rather than all of the data. However, [[25]] the algorithms that they propose are very involved and constrained in their utility.

[0010] U.S. Pat. No. 6,553,366 shows how great economies of data storage requirements and time can be obtained by storing and using various "scalable data mining functions" computed from a relational database. This is the most recent [[30]] version of the "automatic summary table" idea.